

In the Claims:

Please cancel claims 1-22. Please add new claims 23-42. The claims are as follows.

1-22. (Canceled)

23. (New) A method for providing attribute data, said method comprising:

receiving a request from a user device via a network for a virtual ID token relating to attribute information pertaining to a subscriber associated with the user device;

responsive to the request for the virtual ID token, reading a data record from a database, said data record comprising L attributes of the subscriber, L being at least 2;

providing the data record to the user device via the network;

receiving, from the user device via the network, a selection of M attributes of the L attributes, M being less than L;

generating a virtual record including the M attributes selected from the data record, said virtual record comprising a virtual ID (VID) for identifying the virtual record;

storing the generated virtual record in the database; and

providing the virtual ID token to the user device via the network, wherein the virtual ID token comprises the VID, wherein an attribute information providing server performs said receiving the request for the virtual ID token, said reading the data record from the database, said providing the data record to the user device, said receiving the selection of M attributes, said generating the virtual record, said storing the generated virtual record in the database, and said providing the virtual ID token to the user device.

24. (New) The method of claim 23, said method further comprising:

receiving a request comprising the VID for attribute information associated with the VID from an attribute information receiving apparatus via the network;

reading the virtual record from the database in response to the request comprising the VID; and

after said reading, providing the virtual record to the attribute information receiving apparatus via the network, wherein the attribute information providing server performs said receiving the request comprising the VID, said reading the virtual record from the database, and said providing the virtual record to the attribute information receiving apparatus.

25. (New) The method of claim 24, wherein said providing the virtual record to the attribute information receiving apparatus is performed in manner that ensures that the virtual ID is concealed from the attribute information receiving apparatus when the virtual record is received by the attribute information receiving apparatus.

26. (New) The method of claim 25, wherein said providing the virtual record to the attribute information receiving apparatus is performed using a 1-out-of-N OT (Oblivious Transfer) protocol.

27. (New) The method of claim 24, said method further comprising after said providing the virtual record to the attribute information receiving apparatus:

providing, by the attribute information providing server, an attribute certificate to the

attribute information receiving apparatus in relation to a new transaction between the subscriber and the attribute information receiving apparatus, wherein the attribute certificate pertains to the M attributes in the virtual record provided to the attribute information receiving apparatus.

28. (New) The method of claim 24, wherein the attribute information providing server comprises:

- a customer record display unit for displaying the virtual record;
- an attribute selection unit for extracting the M attributes from the data record prior to said generating the virtual record;
- a virtual record generation unit for performing said generating the virtual record;
- a VID token issue unit for performing generating the virtual ID token prior to said providing the virtual token ID to the user device;
- a virtual record referencing unit for referencing the virtual record based on the VID prior to said providing the virtual record to the attribute information receiving apparatus; and
- a virtual record issue unit for performing said providing the virtual record to the attribute information receiving apparatus.

29. (New) The method of claim 23, wherein the VID token further comprises a URL of the attribute information providing server.

30. (New) The method of claim 23, wherein the attribute information providing server is selected from the group consisting of a financial institution, an Internet Service Provider (ISP), and a

shopping site on the network.

31. (New) The method of claim 23, further comprising:

receiving a selection of M1 attributes of the L attributes in the data record, wherein the M1 attributes are not identical to the M attributes; and

storing a second virtual record in the database, wherein the second virtual record comprises the M1 attributes, and wherein the attribute information providing server performs said receiving the selection of M1 attributes and said storing the second virtual record in the database.

32. (New) The method of claim 23, wherein the data record comprises a globally-unique ID (GID) serving as a primary key of the data record, wherein the VID is a primary key of the virtual record, and wherein the VID is independent of the GID.

33. (New) A system comprising a processor and an attribute information providing server stored in a computer readable memory unit coupled to the processor, said attribute information providing server adapted to be executed on the processor to perform a method for providing attribute data, said method comprising:

receiving a request from a user device via a network for a virtual ID token relating to attribute information pertaining to a subscriber associated with the user device;

responsive to the request for the virtual ID token, reading a data record from a database, said data record comprising L attributes of the subscriber, L being at least 2;

providing the data record to the user device via the network;

receiving, from the user device via the network, a selection of M attributes of the L attributes, M being less than L;

generating a virtual record including the M attributes selected from the data record, said virtual record comprising a virtual ID (VID) for identifying the virtual record;

storing the generated virtual record in the database; and

providing the virtual ID token to the user device via the network, wherein the virtual ID token comprises the VID.

34. (New) The system of claim 33, said method further comprising:

receiving a request comprising the VID for attribute information associated with the VID from an attribute information receiving apparatus via the network;

reading the virtual record from the database in response to the request comprising the VID;
and

after said reading, providing the virtual record to the attribute information receiving apparatus via the network.

35. (New) The system of claim 34, wherein said providing the virtual record to the attribute information receiving apparatus is performed in manner that ensures that the virtual ID is concealed from the attribute information receiving apparatus when the virtual record is received by the attribute information receiving apparatus.

36. (New) The system of claim 35, wherein said providing the virtual record to the attribute information receiving apparatus is performed using a 1-out-of-N OT (Oblivious Transfer) protocol.

37. (New) The system of claim 34, said method further comprising after said providing the virtual record to the attribute information receiving apparatus:

providing an attribute certificate to the attribute information receiving apparatus in relation to a new transaction between the subscriber and the attribute information receiving apparatus, wherein the attribute certificate pertains to the M attributes in the virtual record provided to the attribute information receiving apparatus.

38. (New) The system of claim 34, wherein the attribute information providing server comprises:

a customer record display unit for displaying the virtual record;

an attribute selection unit for extracting the M attributes from the data record prior to said generating the virtual record;

a virtual record generation unit for performing said generating the virtual record;

a VID token issue unit for performing generating the virtual ID token prior to said providing the virtual token ID to the user device;

a virtual record referencing unit for referencing the virtual record based on the VID prior to said providing the virtual record to the attribute information receiving apparatus; and

a virtual record issue unit for performing said providing the virtual record to the attribute information receiving apparatus.

39. (New) The system of claim 33, wherein the VID token further comprises a URL of the attribute information providing server.

40. (New) The system of claim 33, wherein the attribute information providing server is selected from the group consisting of a financial institution, an Internet Service Provider (ISP), and a shopping site on the network.

41. (New) The system of claim 33, further comprising:

receiving a selection of M1 attributes of the L attributes in the data record, wherein the M1 attributes are not identical to the M attributes; and

storing a second virtual record in the database, wherein the second virtual record comprises the M1 attributes.

42. (New) The system of claim 33, wherein the data record comprises a globally-unique ID (GID)

serving as a primary key of the data record, wherein the VID is a primary key of the virtual record, and wherein the VID is independent of the GID.